

What is claimed is:

1. A method of interfacing between a client and a mainframe system, comprising:

receiving requests for services from said client;

parsing said requests to obtain parsed requests;

obtaining service definitions based on said parsed requests;

executing commands based on said service definitions, said commands corresponding with applications recognized by said mainframe system for providing results to said requests for services; and

providing said results to said client.

2. A method according to claim 1, wherein receiving said requests for services comprises:

receiving a connection request from said client; and

instantiating a session manager to receive said requests for services.

3. A method according to claim 2, comprising pre-establishing a plurality of session managers, wherein instantiating comprises instantiating one of said plurality of session managers.

4. A method according to claim 1, comprising:

retrieving entitlement information related to said client; and

obtaining said service definitions when said entitlement information indicates said parsed requests can be processed for said client.

5. A method according to claim 4, comprising returning an error message to said client when said entitlement information indicates said parsed requests cannot be processed for said client.

6. A method according to claim 1, wherein:

obtaining service definitions comprises determining if said requests for services are requests for single commands; and

executing commands for providing results comprises executing said single commands at an interface interfacing said client with said mainframe system when said requests for services are requests for single commands.

7. A method according to claim 1, comprising:

creating a plurality of connections with said mainframe system to form a connection pool; and

assigning one of said connections from said connection pool for interacting with said mainframe system when a service request is received.

8. A method according to claim 7, comprising returning said one of said connections to said connection pool when said client chooses to end a session with said mainframe system.

9. A method according to claim 7, wherein:

creating said plurality of connections comprises performing commands corresponding to startup sections of said service definitions; and

executing commands comprises performing commands corresponding to execution

sections of said service definitions.

10. A method according to claim 9, wherein executing commands comprises performing commands corresponding to a closeup section of one of said service definitions to release said plurality of connections when said requests for services include a logout request.

11. A method according to claim 1, comprising:

specifying identifiers for screens of said mainframe system; and

specifying actions to be taken with respect to said screens to generate said service definitions, said actions including one of receiving said requests for services and providing said results.

12. A method according to claim 1, comprising:

opening a socket connection to an interface to facilitate interfacing with said mainframe system; and

managing said interface over said socket connection.

13. A method according to claim 12, wherein managing comprises at least one of controlling access of said clients to said interface, generating said service definitions, and modifying said service definitions.

14. A method according to claim 12, wherein managing comprises:

logging activities of said interface to obtain logs; and

debugging executing commands based on said logs.

15. A computer-readable medium containing instructions for controlling a computer to perform screen-based navigation for interfacing a client with a mainframe system, said instructions controlling a computer to:

define at least one service in a string based command language, said at least one service including at least one mainframe screen interaction;

receive eXtensible Markup Language (XML) requests from said client;

parse said requests into string based command language requests;

determine said at least one service corresponding to said string based command language requests to obtain service script corresponding to said at least one service;

establish a connection to said mainframe system;

execute said service script on said mainframe system to perform said at least one mainframe screen interaction corresponding with said service;

generate results for said at least one mainframe screen interaction in XML format; and

present said results to said client.

16. A computer-readable medium according to claim 15, containing instructions for controlling a computer to:

create a plurality of connections to form a connection pool when said instructions control a computer to define at least one service; and

assign one of said plurality of connections from said connection pool to establish said

connection to said mainframe system.

17. A computer-readable medium according to claim 16, containing instructions for controlling a computer to:

separate said at least one service into a startup section, an execution section and a closeup section when said instructions control a computer to define at least one service;

execute said startup section when said instructions control a computer to create a plurality of connections;

execute said execution section when said instructions control a computer to execute said service script on said mainframe system;

return said one of said plurality of connections to said connection pool when said instructions control a computer to receive an XML request to end a session; and

execute said closeup section to release said plurality of connections when said instructions control a computer to receive an XML request to logout from said mainframe system.

18. An interface for interfacing a client with a mainframe system, comprising:

a session manager receiving requests for services;

a message processor to parse said requests to obtain parsed requests;

a service processor to obtain service definitions based on said parsed requests; and

a host connector interacting with said mainframe system and executing commands based

on said service definitions, said commands corresponding with applications recognized by said mainframe system for providing results to said requests for services.

19. An interface according to claim 18, comprising:

a database for storing a plurality of service definitions; and

a storage manager communicating with said service processor and retrieving from said database said service definitions based on said parsed requests.

20. An interface according to claim 18, comprising an interface engine to listen for a connection request and instantiate said session manager to receive said requests for services related to said connection request.

21. An interface according to claim 20, comprising a connection pool of pre-established connections between said host connector and said mainframe system, said interface engine assigning one of said pre-established connections from said connection pool in response to said connection request.

22. An interface according to claim 20, comprising a thread pool of pre-established session managers, said interface engine instantiating said session manager from one of said pre-established session managers from said thread pool.

23. An interface according to claim 20, comprising:

a cache memory; and

a service cache to store, in said cache memory, said service definitions for said requests for services related to said connection.

24. An interface according to claim 18, comprising an administrative tool for facilitating at least one of creating new service definitions and modifying existing service definitions.

25. An interface according to claim 24, wherein said administrative tool comprises a socket connection communicating administrative requests to said interface.

26. An interface according to claim 18, comprising a command processor to execute administrative commands based on said requests for services when said requests for services are requests for a single command.

27. An interface according to claim 18, comprising an authenticator containing access privilege information for said client, said access privilege information for determining if a client inputting said requests for services is authorized to have said service processor obtain said service definitions based on said parsed requests.

28. An interface according to claim 18, comprising a logging service to log activities of said interface.